MISSOURI DEPARTMENT OF NATURAL RESOURCES
P.O. Box 176 Jefferson City, Missouri 65102 (314) 751-4422

June 22, 1984

REC'D 27 JUN 84

Mr. Jerome C. Patterson
Section Manager, Dept. 191 C
McDonnell Douglas Corporation
P. O. Box 516
St. Louis, MO 63166

RE: McDonnell Douglas Corporation

Dear Mr. Patterson:

This letter is to inform you of the department's final decision to issue a hazardous waste storage permit. I have reached this decision based on the recommendations of my staff which have conducted a careful review of the issues involved.

Attached please find the permit, a copy of the summary of comments explaining the department's final decision, and a news release.

If you have any questions concerning this matter, please direct them to Mr. David E. Bedan, Director of the Waste Management Program.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Fred A. Lafser
Director

FAL:jjms

Enclosure

cc: Mayor Douglas W. Palmer
Mr. Bob Stewart, U.S. EPA, Region VII
St. Louis Regional Office
Division of Environmental Quality

Christopher S. Bond Governor
Fred A. Lafser Director

MISSOURI DEPARTMENT OF NATURAL RESOURCES
P.O. Box 176 Jefferson City, Missouri 65102 (314) 751-4422

CERTIFIED MAIL P395083375

RCV'D 27JUN84

June 22, 1984

Mr. Jerome C. Patterson
Section Manager, Dept. 191C
McDonnell Douglas Corporation
P.O. Box 516
St. Louis, MO 63166

RE: Hazardous Waste Facility Permit #OSO 062284 002

Dear Mr. Patterson:

After public notice in accordance with 10 CSR 25-8.010 and review of the McDonnell Douglas Corporation - St. Louis Tract I, hazardous waste facility application, the Missouri Department of Natural Resources, (Department), has determined that the application conforms with the provisions of the Missouri Hazardous Waste Management Law and all standards, rules, and regulations adopted under this act. In accordance with Section 260.375, Paragraph 13, RSMo, Supplement 1980, the Missouri Department of Natural Resources hereby approves the application and issues Permit Number OSO 062284 002 to McDonnell Douglas Corporation (permittee) for the construction and operation of a hazardous waste facility set forth in the application as the McDonnell Douglas Corporation - St. Louis Tract I storage facility.

The Department is issuing the hazardous waste facility permit to the permittee upon payment of a fee of five hundred dollars ($500.00) for each year the permit is to be in effect beyond the first year. For this ten year permit, the fee is four thousand and five hundred dollars ($4,500) which must be paid for the ten year life of this permit by the permittee.

The McDonnell Douglas Corporation - St. Louis Tract I hazardous waste facility is located at Brown Road at Lindbergh in Hazelwood, Missouri. The site is located in Township 46N. Range 6E. in St. Louis County. The facility will provide storage of hazardous wastes which are approved by the department.

Construction and operation of this hazardous waste facility shall be in accordance with the provisions of the Missouri Hazardous Waste Management Law (Section 260.350 to 260.550), RSMo, the rules and regulations promulgated thereunder (Code of State Regulations, Title 10, Division 25) as effective on the date of this document, and the engineering plans, specifications, and operating procedures approved by the Department. The final approved engineering plans, specifications, and operating procedures are attached hereon, and made an official part of this permit.

This permit for construction and operation of a hazardous waste facility is issued only to the person named above. This permit is issued for a period of ten (10) years. This permit expires at midnight on June 22, 1994.

After receiving the facility permit, the permittee, may begin construction or alterations at the site in accordance with the approved plans, reports, design specifications, and procedures. When construction is completed as approved in the permit and the financial requirements of 10 CSR 25-7.011(8) have been fulfilled, then the owner/operator shall submit a written request as described in 10 CSR 25-7.011(2)(F)1.K.(III) to the department for authorization to begin operation under the permit.

The permit may, when appropriate, specify a schedule of compliance leading to compliance with the hazardous waste management law and regulations. Any schedules of compliance shall require compliance as soon as possible. If a permit establishes a schedule of compliance which exceeds one year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement. If the time necessary for completion of any interim requirement is more than one year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

An alternative schedule for compliance to allow the permit applicant or permittee to cease conducting regulated activities shall be in accordance with 10 CSR 25-7.011(2)(G)4.

If the permit is for a facility operating under interim status, the department may deny authority to operate under the permit if the construction required under the permit is not completed in accordance with the approved plans within a reasonable time period as specified in the permit, or within the time period as extended by the department for cause due to circumstances beyond the permittee's control. Any appeals of the department's issuance or denial of the permit, or specific permit conditions shall be in accordance with 10 CSR 25-7.011(2)(G)4. and 10 CSR 25-8.010.

The Permittee shall submit a written request as described in 10 CSR 25-7.011(2)(F)1.K.(III) to the department for authorization to begin operation under the permit. This request shall be submitted within forty-five (45) days of receipt of this permit.

GENERAL PERMIT CONDITIONS. The following general permit conditions are applicable to all hazardous waste facilities:

1. Duty to comply. The permittee must comply with all conditions of the permit. Permit noncompliance constitutes a violation of the Missouri Hazardous Waste Management Law and is grounds for enforcement action, permit modifications, or revocation, or denial of a permit renewal application.

2. Permit renewal. If the permittee wishes to continue an activity regulated by the permit after its expiration date, the permittee must apply for and obtain a new permit.

3. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

4. Duty to mitigate. The permittee shall take all steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit.

5. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

6. Permit actions. The permit may be modified or revoked for cause. The filing of a request by the permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance, does not stay any permit conditions.

7. Property rights. The permit does not convey any property rights, of any sort, or any exclusive privilege.

8. Duty to provide information. The permittee shall furnish to the department within reasonable time any information which the department may request to determine whether cause exists for modifying or revoking the permit, or to determine compliance with the permit. Copies of records kept in accordance with the permit conditions shall be furnished to the department upon request.

9. Inspection and entry. The permittee shall allow department employees upon the presentation of credentials and other documents as may be required by law, to--

   A. Enter, at reasonable times, upon the permittee's premises where a regulated facility or activity is located or conducted, or where required records are kept;

   B. Have access to and copy at reasonable times any records kept under the conditions of the permit;

   C. Inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit; and

D. Sample or monitor at reasonable times for the purpose of assuring permit compliance or as otherwise authorized by 260.350 - 260.430 RSMo. any substances or parameters at any location.

10. Monitoring and records.

A. Samples and measurements taken for the purpose of monitoring, or required for compliance shall be sufficient to yield data which are representative of the monitored activity. The accompanying approved engineering plans, specifications and operating procedures and appropriate special permit conditions specify the type, intervals, and frequency of sampling;

B. The permittee shall retain records of all monitoring information including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all data used to complete the application for this permit until the department approves closure of the facility. Upon written authorization by the department records may be retained on microfilm, or equivalent.

C. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations for the active life of the facility, and

D. Records of monitoring information shall include:

(I) The date, exact place, and time of sampling or measurements;

(II) The individual(s) who performed the sampling measurements;

(III) The date(s) analyses were performed;

(IV) The individual(s) who performed the analyses;

(V) The analytical techniques or methods used; and

(VI) The results of such analyses.

11. Reporting requirements.

A. General Reporting. The permittee shall comply with all the reporting requirements of 10 CSR 25-7.011(6)(C). The signatory requirements of 10 CSR 25-7.011(2)(C) shall apply to this reporting. All instances of noncompliance shall be reported at time monitoring reports are submitted under the format provided in 10 CSR 25-7.011(6)(C);

B. Planned Changes. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility; and

C. Anticipated Noncompliance. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee may not treat, store or dispose of hazardous waste and for a facility being modified, the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility, until:

I. The permittee has submitted to the department by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

II. The department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or within thirty (30) days of the date of submission of the letter in 10 CSR 25-7.011(2)(F)1.K.(III)(a), the permittee has not received notice from the department of its intent to inspect, prior inspection is waived and the permittee may commence storage of hazardous waste.

D. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than fourteen days following each schedule date.

12. Financial requirements. The permittee shall begin operation of the facility under the permit only after complying with the financial requirements of 10 CSR 25-7.011(8) and receiving written approval from the department.

13. Requirements for recording and reporting of monitoring results. The permittee shall monitor as specified in 10 CSR 25-7. and shall record and report the results of such monitoring as required in 10 CSR 25-7.011(6)(B) and (C).

14. Transfers. This permit is not transferable to any person. The transfer of rights under this permit shall not occur unless a new permit has been applied for and issued, approving such transfer. An application must be filed at least one hundred eighty (180) days prior to the proposed transfer.

15. Signatory Requirements. All applications, reports or information submitted to the department pursuant to this permit shall be signed and certified as provided in 10 CSR 25-7.011(2)(C)4.

16. Other Information. Where the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the department, he shall promptly submit such facts or information.

SPECIAL PERMIT CONDITIONS. The department has established the following additional permit conditions for the permittee's hazardous waste storage facility:

1. Storage at this facility shall be in tanks and containers as outlined below:

   A. Storage in Containers.

      I. <u>Waste Identification</u>. The Permittee may store the following wastes in the containers at the facility, subject to the terms of this permit:

Hazardous Waste No.	Hazardous Waste
D001	A waste which exhibits the characteristic of ignitability, as specified in 10 CSR 25-4.010(2)
D002	A waste which exhibits the characteristic of corrosivity, as specified in 10 CSR 25-4.010(3)
D003	A waste which exhibits the characteristic of reactivity, specified in 10 CSR 25-4.010(4)
D004	A waste which exhibits the characteristic of EP toxicity which, using the test method described in 10 CSR 25-4.010(5)(B) or an equivalent method, the extract from a representative sample of the waste contains arsenic (As) greater than 5.0 milligrams per liter (mg/1).
D005	A waste which exhibits the characteristic of EP toxicity which, using the test method described in 10 CSR 25-4.010(5)(B) or an equivalent method, the extract from a representative sample of the waste contains barium (Ba) greater than 100 mg/1.
D006	A waste which exhibits the characteristic of EP toxicity which, using the test method described in 10 CSR 25-4.010(5)(B) or an equivalent method, the extract from a representative sample of the waste contains cadmium (Cd) greater than 1.0 mg/1.
D007	A waste which exhibits the characteristic of EP toxicity which, using the test method described in 10 CSR 25-4.010(5)(B) or an equivalent method, the extract from a representative sample of the waste contains chromium (Cr) greater than 5.0 mg/1.

Hazardous Waste No.	Hazardous Waste
D008	A waste which exhibits the characteristic of EP toxicity which, using the test method described in 10 CSR 25-4.010(5)(B) or an equivalent method, the extract from a representative sample of the waste contains lead (Pb) greater than 5.0 mg/1.
D009	A waste which exhibits the characteristic of EP toxicity which, using the test method described in 10 CSR 25-4.010(5)(B) or an equivalent method, the extract from a representative sample of the waste contains mercury (Hg) greater than 0.2 mg/1.
D010	A waste which exhibits the characteristic of EP toxicity which, using the test method described in 10 CSR 25-4.010(5)(B) or an equivalent method, the extract from a representative sample of the waste contains selenium (Se) greater than 1.0 mg/1.
D011	A waste which exhibits the characteristic of EP toxicity which, using the test method described in 10 CSR 25-4.010(5)(B) or an equivalent method, the extract from a representative sample of the waste contains silver (Ag) greater than 5.0 mg/1.
F001	The following spent halogenated solvents used in degreasing tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; and sludges from the recovery of these solvents in degreasing operations.
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, and trichlorofluoromethane, and the still bottoms from the recovery of these solvents.

Hazardous Waste No.	Hazardous Waste
F003	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; and the still bottoms from the recovery of these solvents.
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, and pyridine; and the still bottoms from the recovery of these solvents.
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tinplating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin zinc and aluminum plating on carbon steel and (6) chemical etching and milling of aluminum.
F007	Spent cyanide plating bath solutions from electroplating operations (except for precious metals electroplating spent cyanide plating bath solutions).
F008	Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process (except for precious metals electroplating plating bath sludges).
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (except for precious metals electroplating spent stripping and cleaning bath solutions).
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning).
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum

II. Condition of Containers. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit.

III. Compatibility of Waste with Containers. The Permittee must use a container which is made of or lined with materials which will not react with or be impaired by the hazardous waste stored in the container. Wastes stored within a container must be compatible with the container.

Containers shall be utilized as specified below to store wastes with liquids:

Dept. of Transportation Spec. No.	Container Description	Waste Type
17E	5 gal. drum, Tight Head, Bung Type	oils, solvents, alkaline solvents
17H	55 gal. drum, Removable Head	paint sludges and solids which will not corrode steel
37M	55 gal. drum, Polyethylene Lined Tight Head, Bung Type	acid solutions
2U with 21P	5 gal. Polyethylene Carboys with Cardboard Overpack	acids, alkalis, and compatible organic fluids

IV. Special Requirements for Incompatible Waste.

a. The Permittee shall not place incompatible wastes or incompatible wastes and materials in the same container, unless such action is in compliance with 10 CSR 25-7.011(3)(G).

b. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.

c. The Permittee shall separate containers of incompatible wastes. Container storage areas shall be defined as follows:

Storage Area	Storage Description	Hazardous Waste No.
Area No. 1, Section 1	Acids and Alkalis Storage	D002, D003, D004, D005, D006, D007, D008, D010, D011, F019
Area No. 1, Section 2	Paint Sludge, Oils, and Solvent Storage	D001, D007, D008, D011, F001, F002, F003, F005
Area No. 2	Cyanides and Sulfides Storage	D002*, D003, D004, D005, D006, D007, D008, D009, D010, F007, F008, F009, F011
Area No. 3	Explosives Storage Bldg.	D003

*Area No. 2 may store corrosive waste that exhibit a corrosive characteristic due to it being an aqueous solution with a pH of greater than or equal to 12.5 only; no acidic wastes shall be stored in Area No. 2.

d. Maximum inventory of wastes for each of the storage areas listed above which contains free liquids are as follows:

Storage Area	Capacity
Area No. 1, Section 1	equivalent of 112 - 55 gal. drums
Area No. 1, Section 2	equivalent of 224 - 55 gal. drums
Area No. 2	equivalent of 31 - 55 gal. drums
Area No. 3	no wastes with free liquids

Storage areas that store containers holding wastes that do not contain free liquids need not have a containment system provided that the containers are protected from contact with accumulated liquid.

B. Storage in Tanks

I. The permittee may store the following waste in the manner described below:

Tank I.D.	Capacity in Gals.	Contents	Material of Constr.	Overfill Control	Leak Detection System
H-19	10,000	19% sodium hydroxide	Carbon steel	Containment curb with drain to Wastewater Pretreatment Plant	pH sensor with alarm
H-20	10,000	"	"	"	"
H-12	500	57% nitric acid 8% Hydro-fluoric acid	Black polyethylene	"	
H-13	500	"	"	"	"
H-14	500	"	"	"	"
H-15	500	"	"	"	"
H-16	500	"	"	"	"
H-1	750	57% nitric acid 8% hydro-fluoric acid	High Density black polyethylene	"	"
H-2	750	"	"	"	"
H-3	750	"	"	"	"
H-4	750	"	"	"	"
H-5	750	"	"	"	"
H-6	750	"	"	"	"

Tank I.D.	Capacity in Gals.	Contents	Material of Construction	Overfill Control	Leak Detection System
Hush House Waste Tank	3,380	JP-4/JP-5 Turbine engine fuel plus hydraulic oils	Polyester resins reinforce with glass fibers	80% full level alarm	Groundwater hydrocarbon detection system
Fuel Pit No. 3 Waste Tank	2,000	"	Carbon steel	75% full level alarm	"
Fuel Pit No. 4 Waste Tank	2,000	"	"	"	"
F-18 Silencer Waste Tank	2,130	"	Fiberglass	"	"
Bldg. 28 Waste Tank	5,000	JP-4/JP-5 Turbine engine fuel	Carbon steel	Manually checked after each "spill"	"
Bldg.6 Waste Oil	1,000	Lubricating oil	Carbon steel	None	"

Tank I.D.	Capacity in Gals.	Contents	Material of Construction	Overfill Control	Leak Detection System
Bldg. 14 Sludge Holding	120,000	Industrial Wastewater Pretreatment sludge	Reinforced concrete	Overflow piped to Pretreatment Plant influent (closed loop)	Daily visual
Ramp Station 1&2 Waste Tank	4,380	JP-4/JP-5 Turbine engine fuel	Polyester resins reinforced with with glass fibers	80% full level alarm	Ground water hydrocarbon detection system

II. General Operating Requirements

a. The Permittee shall protect tanks from accelerated corrosion, erosion or abrasion.

Corrosion, erosion, and abrasion includes weakening a tank by chemical action which could result in the cracking, swelling or other adverse effect to the integrity of the tank.

Specific operating requirements for polyethylene tanks are as follows:

(1) The operating temperature must be maintained below 140°F.

(2) Electric immersion heaters must not touch the tanks.

(3) Care must be taken not to stress the tanks or subject them to unusually harsh treatment when ambient temperatures are below 40°F.

(4) Heavy equipment must not be mounted on the tanks.

(5) The base of the tank must be properly supported.

b. The Permittee shall prevent overfilling of tanks.

c. The Permittee shall upon discovery of a leaking tank, or leaking piping to or from a tank, immediately; stop waste addition to the tank, drain or otherwise prevent further leakage, and repair or replace the defective equipment.

d. The Permittee shall inspect the hydrocarbon leak detectors as described in the application.

EMERGENCY DIRECTIVE. In the event the department finds a situation which could result in substantial endangerment to human health or the environment, the department may issue a temporary emergency directive to allow or require storage or treatment of hazardous waste.

1. This emergency directive--

A. May be oral or written. If oral, it shall be followed within five (5) days by a written notice;

B. Shall not exceed ninety (90) days in duration;

C. Shall specify the hazardous waste to be handled, and the manner and location of storage or treatment;

D. May be terminated by the department at any time without process if it is determined by the department that termination is necessary to protect human health and the environment; and

E. Shall incorporate, to the extent possible and not inconsistent with the situation, applicable requirements of 10 CSR 25-7.

MODIFICATION AND TERMINATION OF PERMIT. When the department receives any information (such as inspection results, information from Permittee, or request from Permittee) it may decide whether cause exists to modify or terminate a facility's permit.

1. Cause for modification of a permit may include but is not limited to:

A. Material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different than or absent from the existing permit; or

B. The fact that standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.

C. Information not known by the department at the time of permit issuance which justifies the application of new or different permit conditions.

D. Any of the circumstances specified as cause for termination or denial of a permit renewal application.

2. Cause for termination or denial of a permit renewal application may include but is not limited to:

A. Noncompliance by the permittee with any substantial condition of the permit;

B. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

C. A determination that the permitted activity endangers human health or the environment.

CONFIDENTIALITY. All permit application information shall be available to the public unless nondisclosure is requested in writing as set forth in section 260.430, RSMo. The McDonnell Douglas Corporation - St. Louis Tract I permit and accompanying material will be available for review by the public at the department's central office in Jefferson City, the St. Louis Regional Office, and the Florissant Valley Branch of the St. Louis County Public Library, 195 S. Florissant Road, in Florissant, MO 63031.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Fred A. Lafser
Director

FAL:jjms

Enclosure

cc: Senator Thomas Eagleton
Senator John Danforth
Congressman Robert A. Young
Senator Fred Dyer
Representative Judith O'Connor
Mayor Douglas W. Palmer
Division of Environmental Quality
St. Louis Regional Office
EPA Region VII